CUE RESERVATION SYSTEM

User Manual

UM043_02_Cue_Reservation_System
16.10.2012
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INTRODUCTION

Overview

Cue Reservation System (CRS) is a new application that expands the range of user functions offered by the Cue System. It is a software solution allowing to plan, schedule and manage conference rooms, lecture rooms and other spaces using CUE touch panels. Microsoft Exchange Server® 2007/2010 is used for planning. In this software, every room has its own account and a calendar used to plan the occupation and use of rooms. Cue units communicate with the server through the Cue Exchange Connector application.

Users can manage room meetings also by Microsoft Outlook or Microsoft Web Outlook using the internet browser.

Parts

Part	Product Code	Description	Note
CRS Core Set	CS0407	ipCUE-omega with pre-installed Cue Exchange Connector	
CRS Single Room License	CS0408	Software license for one room.	Touch panels have to be ordered separately.

Requirements

- Microsoft Exchange Server® 2007 or 2010 with enabled EWS (Exchange Web Services), room accounts for all involved rooms and one user account for CRS.
- CRS Core Set (ipCUE-omega with pre-installed Cue Exchange Connector)
- IP Connection from CRS to EWS of Microsoft Exchange Server and to the internet.
- Desired number of CRS Room Licenses. You need one CRS Single Room License for each room account in Microsoft Exchange Server. It does not have to be equal to the number of touchpanels.
- Desired number of touchpanels. Resolution must be from 640 x 480 pixels to 1280 x 800 pixels.
- Resources downloaded from http://www.cuesystem.com/software_application_resources.aspx. You need a login.
- PC with Cue Visual Composer and Internet Explorer 8.0 or higher for setup only.

Order and Registration

The following steps are necessary to order and register

1. Send the order for Cue Reservation System with the desired number of CRS Single Room Licenses to your sales partner. Use the appropriate product code CS0407 for CRS Core Set and CS0408 for CRS Single Room Licenses.

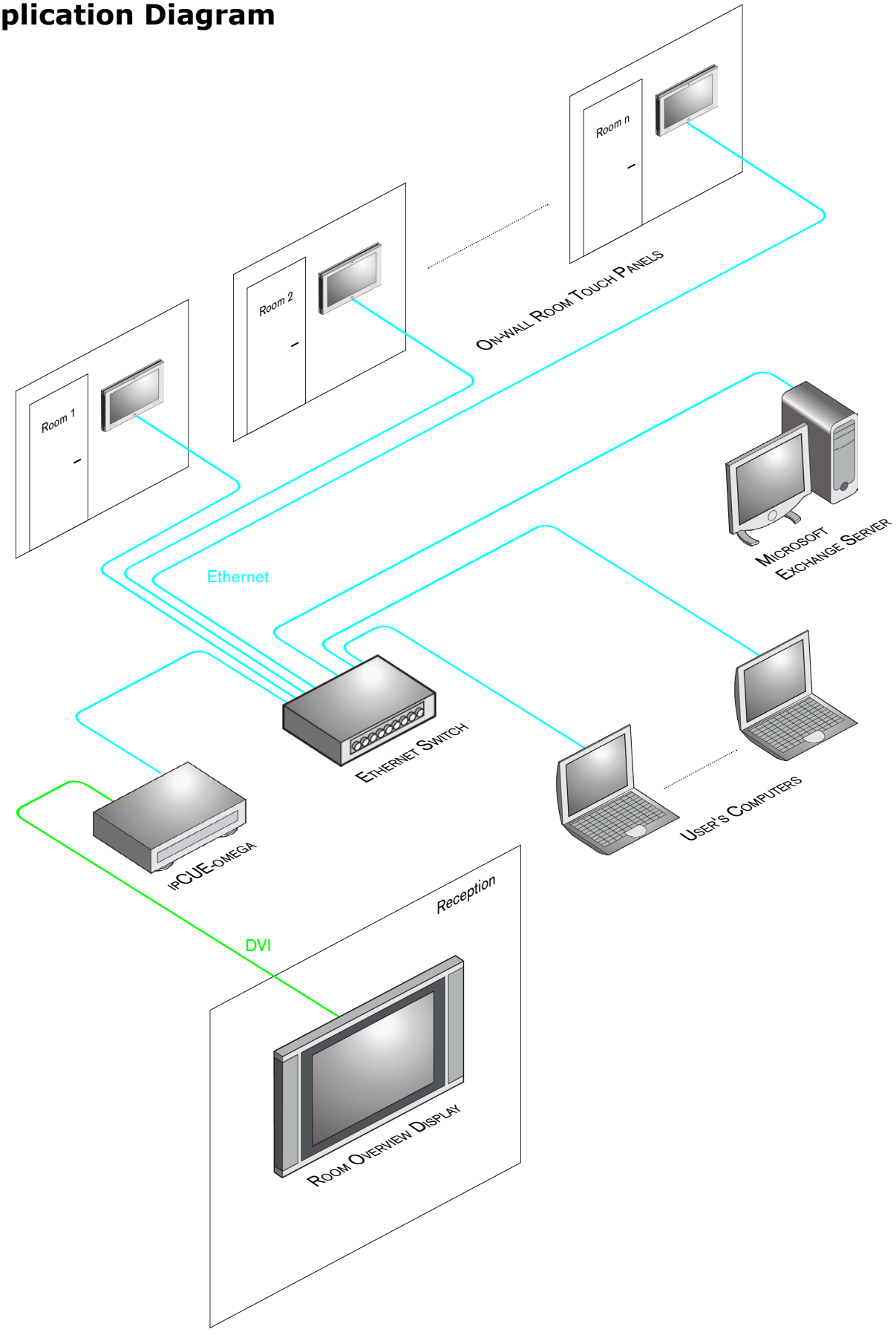
2. You will receive a CRS Core set registered with the desired number of room licences. Licenses are stored in ipCUE-omega.

   You can check the number of registered room licenses in hardware debug mode of ipCUE-omega in debug messages immediately after the start of debug mode (the project must be configured). The following message will be displayed: **"CRS license is valid for total number of X rooms"**. If a license file is missing or corrupted, message **"CRS license is not valid"** will be displayed.

3. If you need to increase the number of room licenses, contact CUE sales department with details.

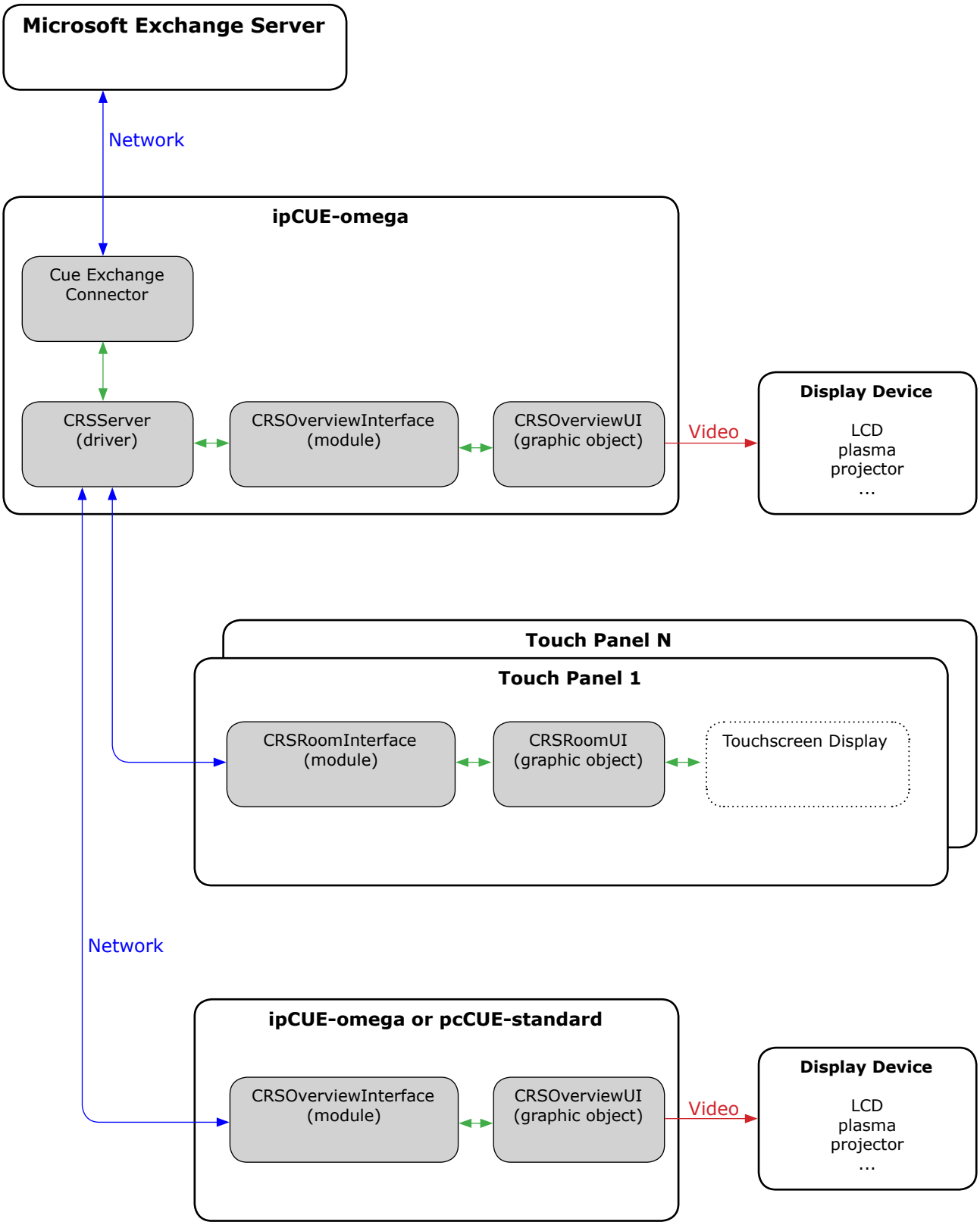
How CRS Works

Application Diagram



Block Diagram

CRS consists of the following software components as described below.



Software Components

Cue Exchange Connector

It is a special service running on ipCUE-omega. This service makes a bridge between the CUE control system and Microsoft Exchange Server. The Cue Exchange Connector is pre-installed on ipCUE-omega and there is no need to configure it.

CRSServer (driver)

This driver is the core of CRS – it communicates with Microsoft Exchange Server (through Cue Exchange Connector) and provides data to all graphic objects.

CRSOverviewUI (graphic object)

This graphic window type object is used to display the data of all rooms, for example in a lobby or reception. The instance of this graphic object is typically created in ipCUE-omega, whose video output is connected to the lobby monitor. This graphic object requires the CRSOverviewInterface module. CRSOverviewUI can run on touchpanel or other CUE units with graphic output with resolution from 640 x 480 pixels to 1920 x 1080 pixels.

The number of displayed lines depends on monitor resolution. If it is possible to show all room lines on the screen, all room lines are static. If the number of rooms is higher than the maximum number of lines, room lines will automatically scroll to show all room data sequentially.

CRSOverviewInterface (module)

CRSOverviewInterface joins the functions of graphic object and driver CRSServer.

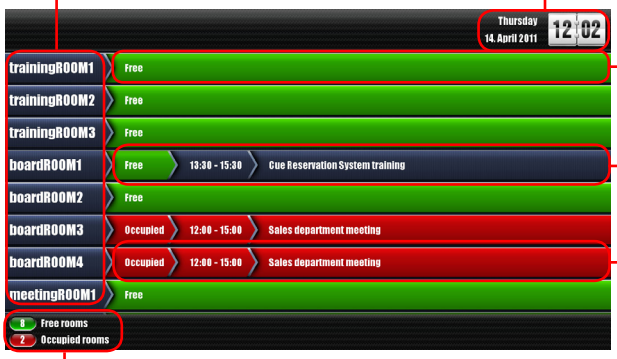
CRSRoomUI (graphic object)

This window-type graphic object is used to display data of a single room, for example in the touchpanel close to the entry door or in the touchpanel inside the room. This graphic object requires the CRSRoomInterface module. CRSRoomUI requires a touchpanel with a resolution from 640 x 480 pixels to 1280 x 800 pixels.

CRSRoomInterface (module)

CRSRoomInterface joins the functions of a graphic object and driver.

Room Overview Graphic Interface



Room names

Current date and time

Line showing a free room. For the rest of the day the room will be free.

Line showing a free room. There will be some meeting today later.

Line showing an occupied room

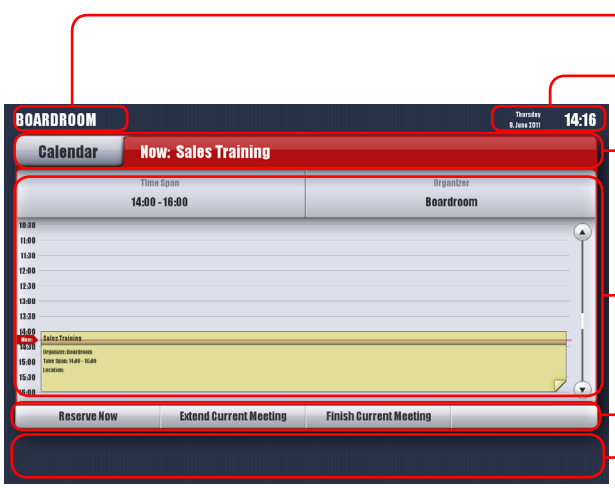
Number of free and occupied rooms

Room User Graphic Interface

Introduction

Users can control the basic functions of CRS on room touchpanels using the graphic interface described below.

Room Occupied View



Room name

Current date and time

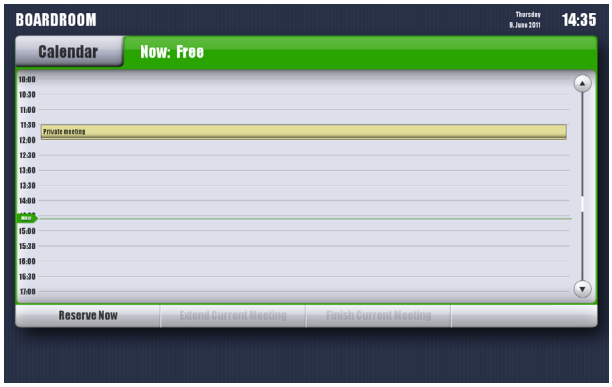
Tabs for switching between current day view and calendar view.

Meeting information

Control buttons

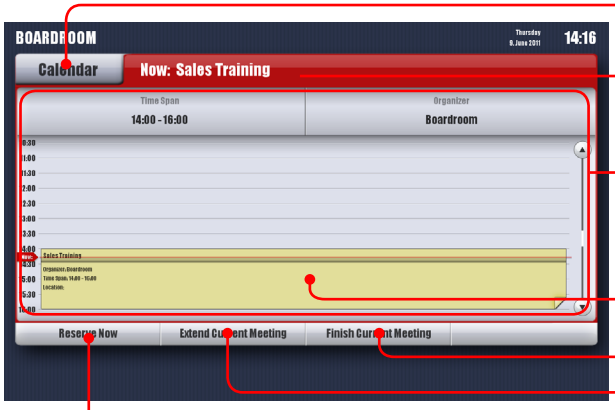
Space for navigation bar, company logo etc.

Room Free View



Screen Now

This screen displays meetings for the current day.



This Tab activates **Calendar** screen

Current meeting description (subject)

This area contains
- Basic meeting information – time span and organizer
- Meetings for the current day. Use arrows for time scrolling.

Click meeting area to activate screen **Meeting Details**.

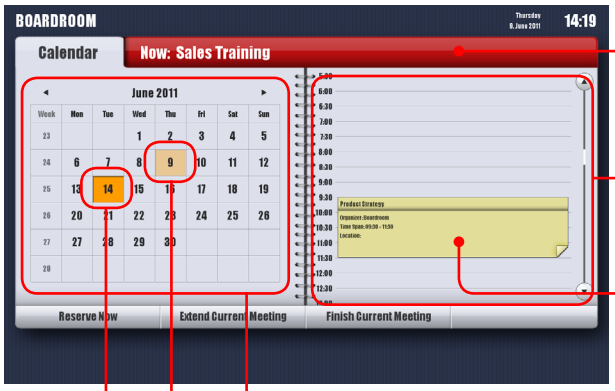
Activates **Finish Current Meeting** screen.

Activates **Extend Current Meeting** screen.

Activates **Reserve Now** screen.

Screen Calendar

This screen displays meetings for any selected date.



This Tab activates **Now** screen.

This area contains meetings for the day selected by date picker. Use arrows for time scrolling.

Click meeting area to activate **Meeting Details** screen.

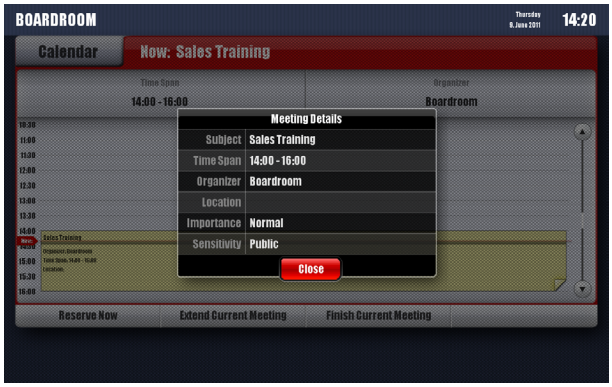
Date picker

Current day

Selected day

Screen Meeting Details

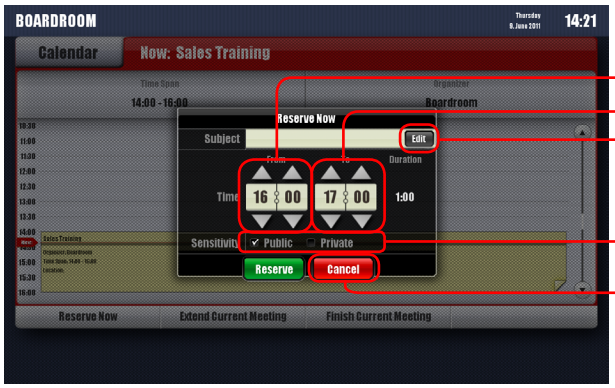
This screen displayes details of the selected meeting.



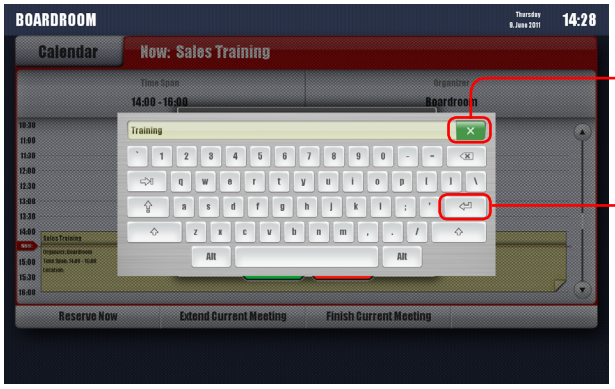
Screen Reserve Now

This screen enables you to reserve a room. It is necessary to fill in a subject using graphic keyboard and start /end time using appropriate spin buttons.

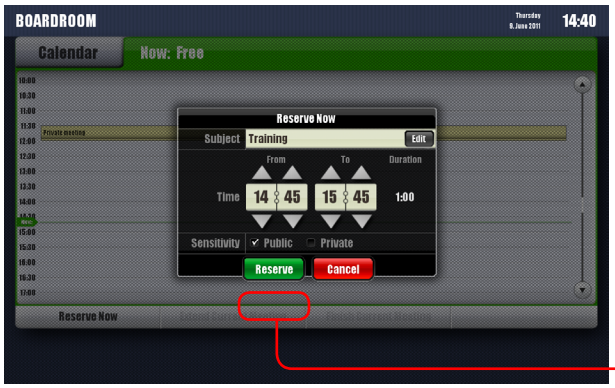
In addition, sensitivity of the meeting can be set. If a meeting is marked as PRIVATE, title "PRIVATE MEETING" is displayed instead of real meeting subject. All details of PRIVATE meeting will be hidden.



Set meeting start time
Set meeting end time
Activates keyboard
Set meeting sensitivity
Cancel reservation



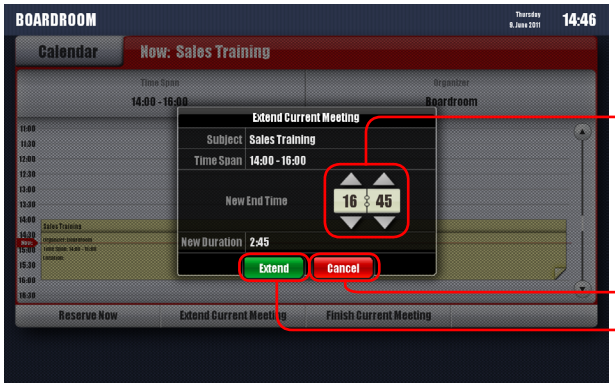
Cancel button
Confirm meeting subject



Confirm reservation

Screen Extend Current Meeting

This screen enables you to extend (prolong) the current meeting. Set new requested end the time using time spin button.



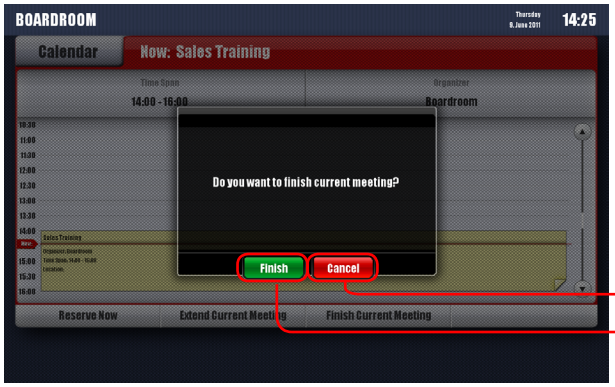
Set new end time for current meeting.

Cancel extend

Confirm extend

Screen Finish Current Meeting

This screen serves for immediate termination of the current meeting.



Cancel finish

Confirm finish

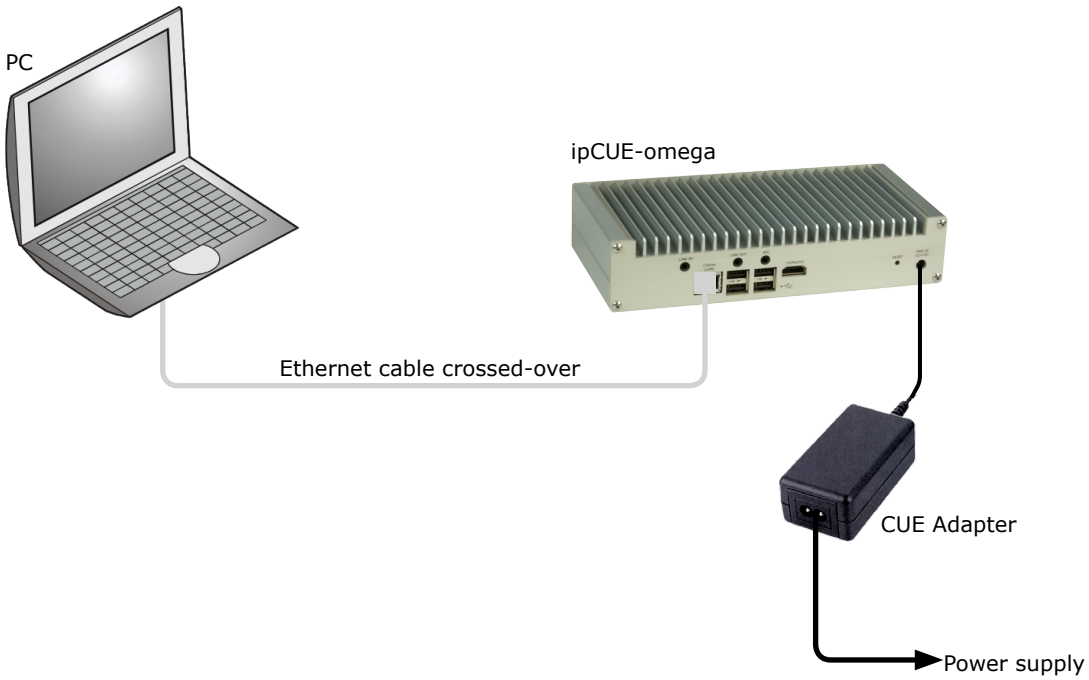
ipCUE-omega Setup

The setup consists of three steps

1. Conection with PC
2. Windows Local Network Settings
3. Setup using Admin Web

Connection

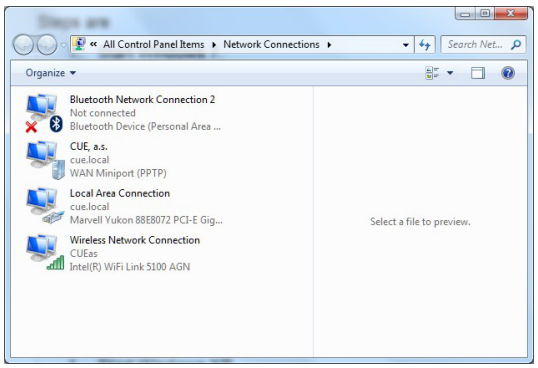
Connect ipCUE-omega to your PC as described in the following picture.



Windows Local Network Settings

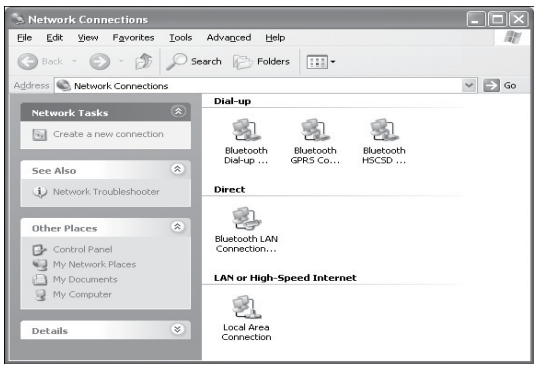
For Windows 7, the steps are

1. Start Windows 7.
2. Click Start.
3. Enter **ncpa.cpl** to the Search Box and press Enter. The following window is displayed.



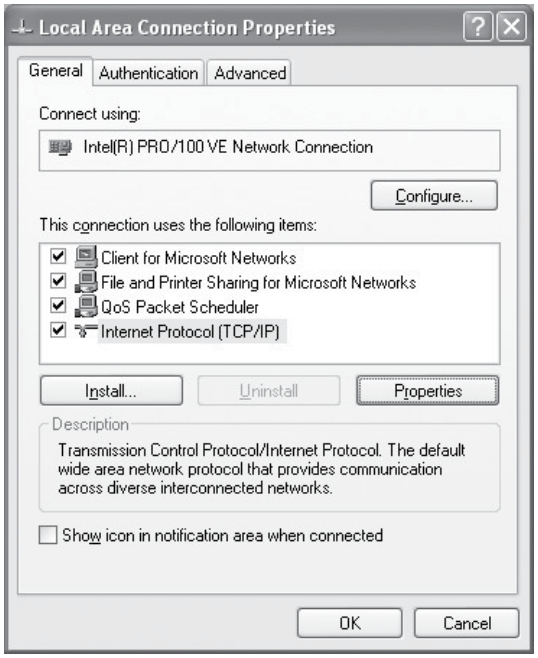
For Windows XP, the steps are

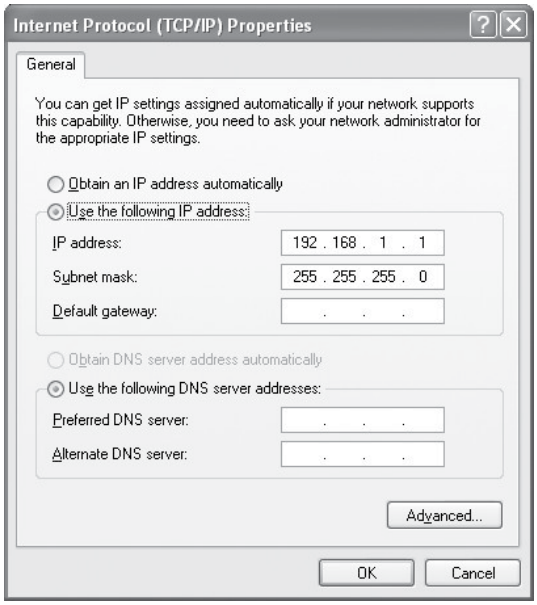
1. Start Windows XP.
2. Click on Start, then click on Control Panel and choose the option to switch to Classic View.
3. Double-click on Network Connections.



The following steps are

1. Right-click on network adapter used for connection with touch panel and then right-click and select Properties.
2. Select Internet Protocol (TCP/IP) and click on properties button.
3. Select Use the following IP address option. Set IP address to 192.168.1.1 (or other address different from 192.168.1.127 and from 192.168.1.128) and Subnet mask to 255.255.255.0. Leave other options unchanged and click OK.




Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 1 . 1
Subnet mask: 255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Setup Using Admin Web

Take the following steps

1. Start the web browser and enter the address 192.168.1.128.

2. Set IP address and subnet mask and gateway of ipCUE omega in Configuration/IP settings to address corresponding to your project network topology. It is not recommended to use default IP addresses of CUE units (192.168.1.127 and 192.168.1.128). Apply changes and confirm restart of ipCUE-omega.

3. If your new IP address is in a different segment, change the IP address of your computer to this segment. Enter the new IP address of ipCUE-omega to the web browser.

4. Go to section Configuration and set DNS – address of your Domain Name Server.

5. Set the current date, time and your time zone in section Date and Time. Correct settings of time and time zone are necessary for reliable functioning of CRS.

6. It is recommended to use internet clock for automatic time synchronization using public or local NTP server. If possible, use the same server as used by Microsoft Exchange Server. You can do it in adminweb section Date and time / Internet clock. Do the same Internet Clock settings in all touchpanels involved in CRS.

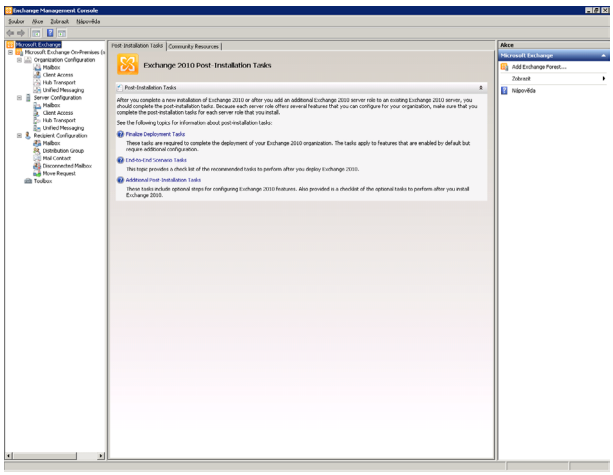
Settings of Microsoft Exchange Server

Step 1

Settings of Microsoft Exchange server are made using Exchange Management console - see picture.

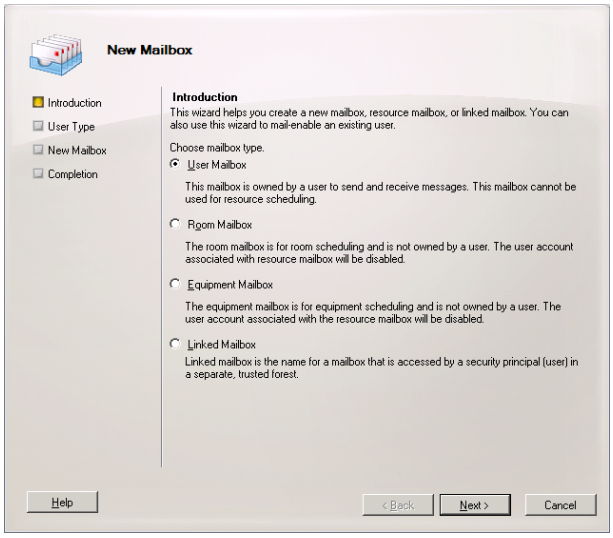
Use your Exchange Management console to create an account for Cue Reservation System user. CRS works with this account to manage room data.

In section Recipient Configuration select the Mailbox folder and start the wizard to create a new account.



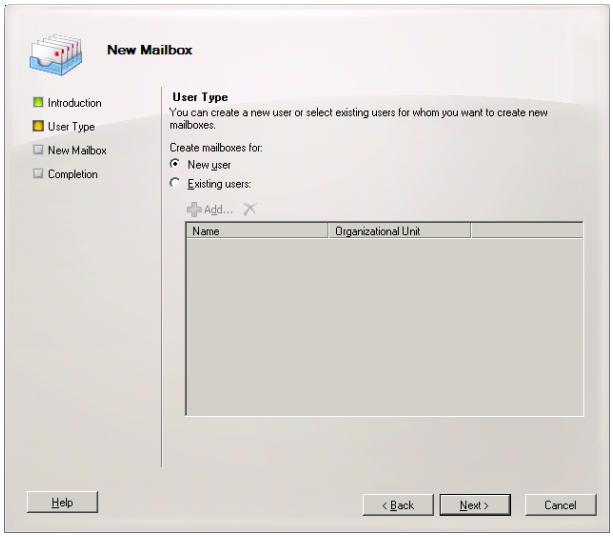
Step 2

Select User Mailbox and click Next.


New Mailbox
Introduction
User Type
New Mailbox
Completion
Introduction
This wizard helps you create a new mailbox, resource mailbox, or linked mailbox. You can also use this wizard to mail-enable an existing user.
Choose mailbox type.
User Mailbox
This mailbox is owned by a user to send and receive messages. This mailbox cannot be used for resource scheduling.
Room Mailbox
The room mailbox is for room scheduling and is not owned by a user. The user account associated with resource mailbox will be disabled.
Equipment Mailbox
The equipment mailbox is for equipment scheduling and is not owned by a user. The user account associated with the resource mailbox will be disabled.
Linked Mailbox
Linked mailbox is the name for a mailbox that is accessed by a security principal (user) in a separate, trusted forest.
Help
< Back
Next >
Cancel

Step 3

Select New user and click Next.

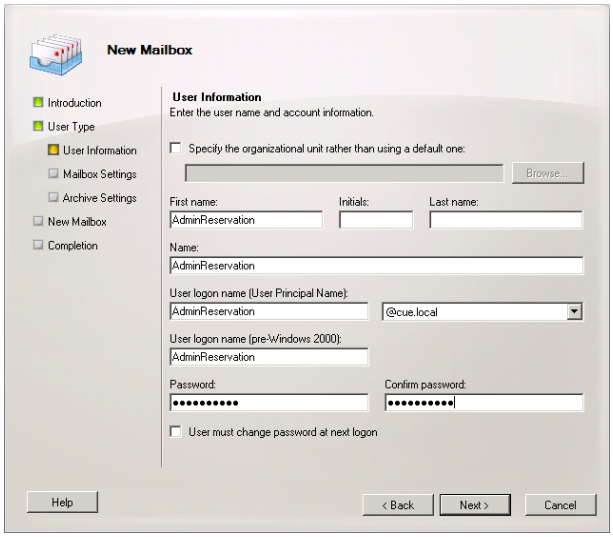


Step 4

Choose CRS user account name in the item User logon name (User Principal Name), for example AdminReservation, a domain of mailserver (for example @cue.local) and a password.

This parameter will be needed later in CRSServer settings

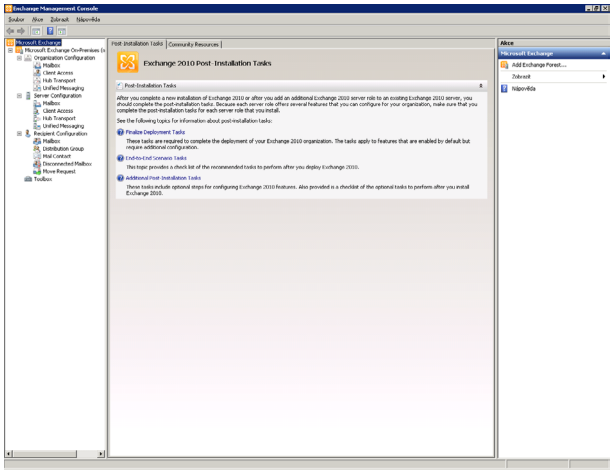
- User logon name is identical with the ExchangeUserLogonName in CSRServer properties
- E-mail domain (in our example "@cue.local") is identical with the ExchangeRoomEmailDomain in CSRServer properties.
- Password is identical with the ExchangePassword in CSRServer properties.



Step 5

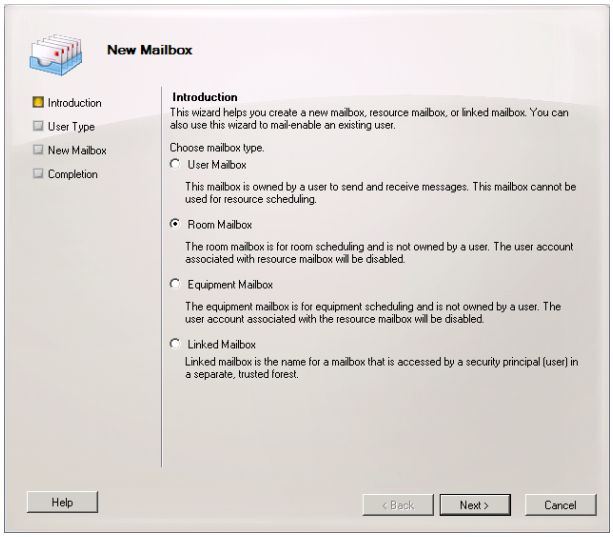
Now we can create accounts for each room involved in CRS including the permissions using the Exchange Management Console.

In section Recipient Configuration, select folder Mailbox and start wizard to create a new account.



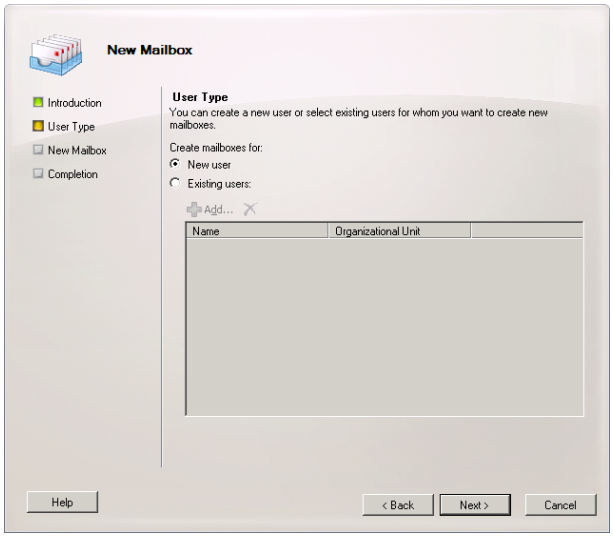
Step 6

Select Room Mailbox and click Next.


New Mailbox
Introduction
User Type
New Mailbox
Completion
Introduction
This wizard helps you create a new mailbox, resource mailbox, or linked mailbox. You can also use this wizard to mail-enable an existing user.
Choose mailbox type.
User Mailbox
This mailbox is owned by a user to send and receive messages. This mailbox cannot be used for resource scheduling.
Room Mailbox
The room mailbox is for room scheduling and is not owned by a user. The user account associated with resource mailbox will be disabled.
Equipment Mailbox
The equipment mailbox is for equipment scheduling and is not owned by a user. The user account associated with the resource mailbox will be disabled.
Linked Mailbox
Linked mailbox is the name for a mailbox that is accessed by a security principal (user) in a separate, trusted forest.
Help
< Back
Next >
Cancel

Step 7

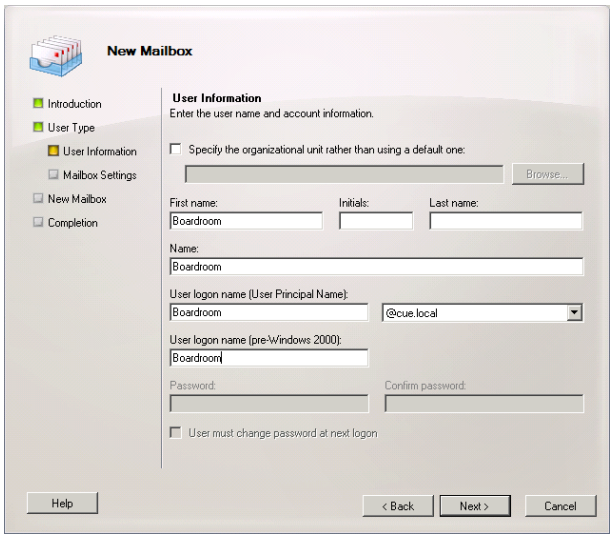
Select New user and click Next.



Step 8

Choose a room account name in the item User logon name (User Principal Name), for example Boardroom, and a domain of mailserver (use the same domain as used in CRS user account).

User logon name is identical with the RoomAccountXX in CSRServer properties, section ExchangeRoomAccounts.

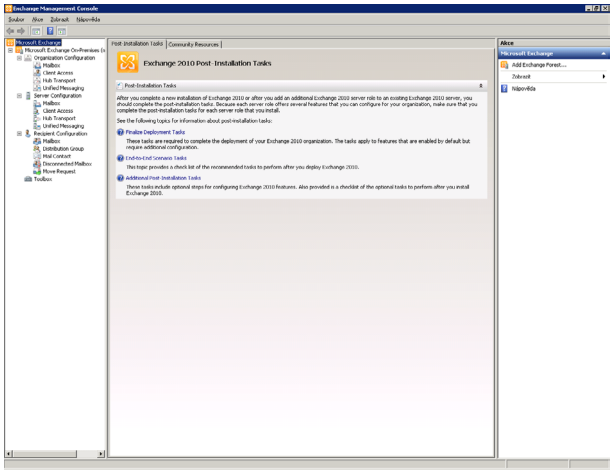


Step 9

Now we will set the permission for the CRS user account to manage this room account.

We will use the wizard in Exchange Management Console – Manage Full Access Permisions.

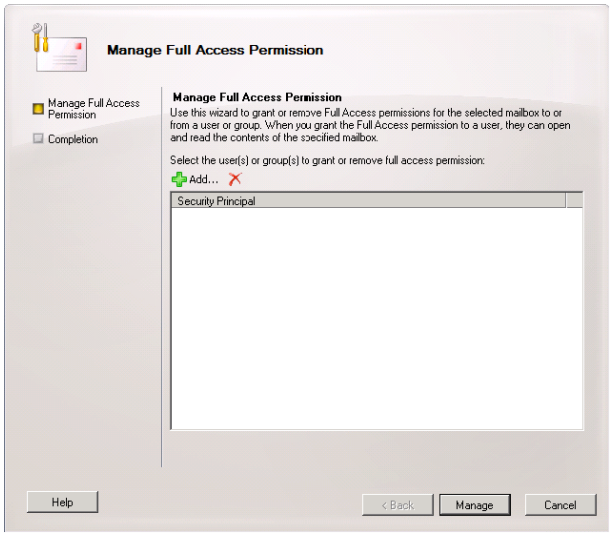
In section Recipient Configuration, select folder Mailbox and start wizard to Manage Full Access Permisions.



Step 10

Click on +Add... and choose CRS user account (in our example it is AdminReservation).

Repeat steps 9 and 10 for each room involved in CRS.


Manage Full Access Permission
Manage Full Access Permission
Completion
Manage Full Access Permission
Use this wizard to grant or remove Full Access permissions for the selected mailbox to or from a user or group. When you grant the Full Access permission to a user, they can open and read the contents of the specified mailbox.
Select the user(s) or group(s) to grant or remove full access permission:
Add...
Security Principal
Help
< Back
Manage
Cancel

Step 11

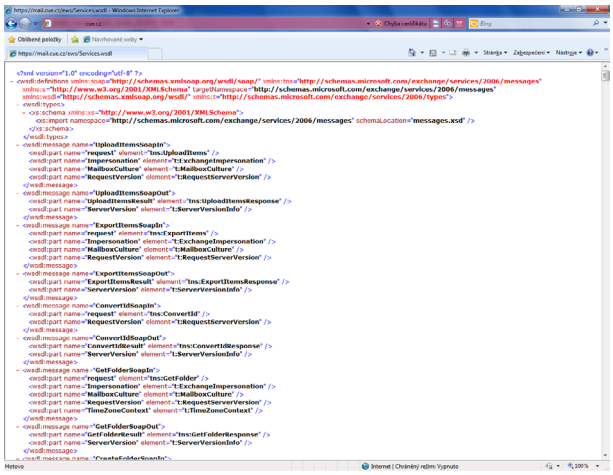
Now test the accessibility of Exchange EWS services using Internet Explorer. Run Internet explorer and enter the address of Exchange server in the following format:

https://ExchangeServerAddress/ews/Exchange.ASMX

This address will be needed later in CRSServer settings as Property ExchangeUR.

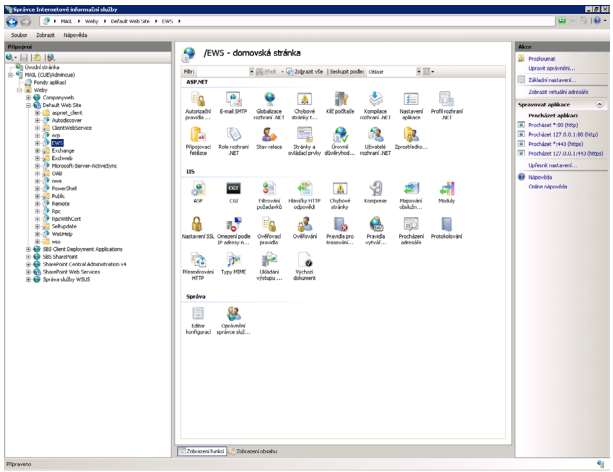
Exchange server will require a login. Use CRS user logon name and password created in step 4.

After logon, a page like this should be displayed.



Step 12

If you have problems passing test described above, you have to configure EWS access using IIS manager on your server. Please check the settings of firewall to see whether it does not block HTTPS protocol on the port 443.



Project Configuration

CVC Project Creation

Step 1

Create a new Cue Visual Composer project or open your existing project where CRS will be implemented. You must have CVC version 1.36 or later.

Step 2

Insert one ipCUE-omega to your project (name of this unit is Controller1 in the following examples) and one touchpanel. It is possible to copy touchpanels in configuration tab, therefore it is easier to program the touchpanel first and then copy this (already programmed) touchpanel to the required number. Set on the ipCUE-omega and touchpanel the required unique IP address.

Step 3

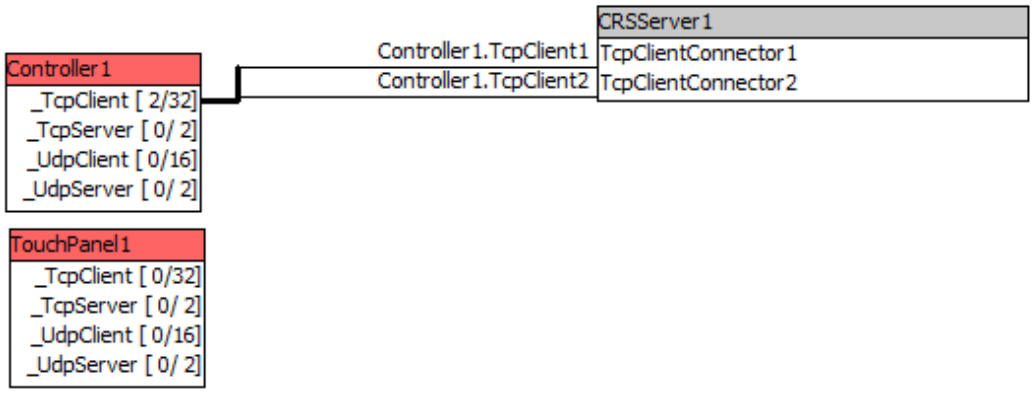
Add the following software components to the project resources:

1. CRSServer (fileCUE_CRSServer_CRS_MSEx2007_Tcp_Client_x.xx.cvcd)
2. CRSRoomUI (fileCRSOverviewUI_x.xx.cvcg)
3. CRSOverviewUI (file CRSRoomUI_x.xx.cvcg)
4. CRSOverviewInterface (file CRSRoomInterface_x.xx.cvcm)
5. CRSRoomInterface (file CRSRoomInterface_x.xx.cvcm)

You can find all these components in ZIP file downloaded from http://www.cuesystem.com/crs_resources.aspx. You need a login.

Step 6

Create an instance of CRSServer (drag this driver from resources area to configuration tab). Set instance name to **CRSServer1**. The **CRSServer1** driver instance must be connected to two free TcpClient channels on ipCUE-omega. Only one instance of CRSServer can be used in one ipCUE-omega. The settings of **CRSServer1** properties will be described later.



Step 7

If the video output of ipCUE-omega is connected to the monitor displaying room reservation (for example in lobby area)

- Create an instance of CRSOverviewUI window in ipCUE-omega (drag and drop CRSOverviewUI from graphic resources to Controller1/Windows) and name it **CRSOverviewUI1**.
- Place command CRSOverviewUI1.ShowObject() to process Autoexec (it is placed inController1/ Modules/Main) or choose another way of showing this window (for example by navigation bar, see Chapter …. below).

- Import module from file CRSOverviewInterface_x.xx.cvcm to Controller1/Modules and rename it to **CRSOverviewInterface1** (right-click on free space in tab Controller1/Modules, select Import... and select the file).

Step 8

- Create an instance of CRSRoomUI window in the touchpanel (drag and drop CRSRoomUI from graphic resources to TouchPanel1/Windows) and name it **CRSRoomUI1**.
- Place the command CRSRoomUI1.ShowObject() to process Autoexec (it is placed inTouchPanel1/Modules/Main) or choose another way of showing this window (for example by navigation bar, see Chapter …. below).
- Import module from file CRSRoomInterface_x.xx.cvcm to TouchPanel1/Modules and rename it to **CRSRoomInterface1**.

Step 9

Set Exchange Server (see chaptes Settings of Microsoft Exchange Server)

Step 10

Set the properties of **CRSServer1** corresponding to the settings of Microsoft Exchange Server

Step 11

Set the properties of graphic objects (see chapter CRS RoomUI Properties and CRSOverviewUI Properties).

Step 12

Copy the touch panel to the required number (select the touchpanel in CVC Configuration tab, copy the panel to clipboard by CTRL-C shortcut and then paste the required number of copies by CTRL-V shortcut). After that it is necessary to set the required unique IP addresses on all touchpanels in the project (touchpanel properties).

Step 13

Set the required IP addresses (corresponding to IP addresses in the CVC project) on all hardware units (ipCUE-omega and touchpanels) using webadmin or OSD.

Step 14

Connect all touch panels, ipCUE-omega and your PC to the network (set a suitable unique IP address of your PC).

Step 15

Upload the project to all CUEunits. Please be patient, the initialization of all programs needs about 30 seconds.

Step 16

On all touchpanels with CRSRoomUI, the error message Room not found will appear. Now you have to assign a room to each panel. See Chapter User Settings.

Step 17

In case of any troubles, see the chapter Troubleshooting.

Settings of CRS Software Components

CRSServer Properties

The most important settings of CUE Reservation System are made by the properties of CRSserver driver. There are more groups of properties.

Appearance Group

This group of properties sets the appearance of all GUI objects involved in Cue ReservationSystem.

Property Name	Data Type	Allowed Values	Default Value	Description
DateFormat	Long	dddd<nl>d. MMMM yyyy := 1 d.M.yyyy := 2 d-M-yy := 3 yyyy-MM-dd := 4 yyyy-M-d := 5 yy-M-d := 6	1	Format of date displayed on graphic objects in top right corner
FirstDayOfWeek	Long	Monday := 1 Tuesday := 2 Wednesday := 3 Thursday := 4 Friday := 5 Saturday := 6	1	First day of week displayed in month calendars in GUI
FirstWeekOfYear	Long	Starts on January 1st := 0 First full week := 1 First 4-day week := 2	0	Determines which week of the year is calculated as the first in month calendars in GUI
TimeFormat	Long	'24' := 2 '12 AM/PM' := 3	2	Determines which time format (24 hour or 12 hour AM/PM) is used in GUI

Behavior Group

Property Name	Data Type	Allowed Values	Default Value	Description
OccupiedBefore	Time	>= 0:0.0	10:00.0	Determines how long before start of meeting the room is marked as occupied
OccupiedAfter	Time	>= 0:0.0	2:00.0	Determines how long after end of meeting the room is marked as occupied

ExchangeSettings Group

In this group of properties there is a list of all room accounts involved in CRS. If you have less then 40 rooms, fill the accounts from the beginning.

Property Name	Data Type	Allowed Values	Default Value	Description
ExchangeURL	Text	Max. length 256 chars	Empty	URL address of Exchange Web Services. This address was used in step 11 in chapter Settings of Microsoft Exchange Server.
ExchangeDomain	Text	Max. length 100 chars	Empty	Domain of Exchange server. Typically it is a network domain name from your domain controller.
ExchangeUserLogonName	Text	Max. length 100 chars	Empty	Name of CRS user account (see step 4 in chapter Settings of Microsoft Exchange Server).
ExchangePassword	Text	Max. length 100 chars	Empty	Password of CRS user account (see step 4 in chapter Settings of Microsoft Exchange Server). This value can be changed from CRSRoomUI in touchpanels.
ExchangeTimeout	Time	Any positive	:10.0	Timeout for communication with Microsoft Exchange Server. If no reply is received within this time, error message is displayed on GUI objects.
ExchangeRoomEmailDomain	Text	Max. length 100 chars	Empty	Room e-mail domain (see step 8 in chapter Settings of Microsoft Exchange Server)

RoomAccounts Group

Property Name	Data Type	Allowed Values	Default Value	Description
RoomAccount01	Text	Max. length 256 chars	Empty	Name of room 1 account in Microsoft Exchange Server (see step 8 in chapter Settings of Microsoft Exchange Server)
...	...	...	...	...
RoomAccount40	Text	Max. length 256 chars	Empty	Name of room 40 account in Microsoft Exchange Server

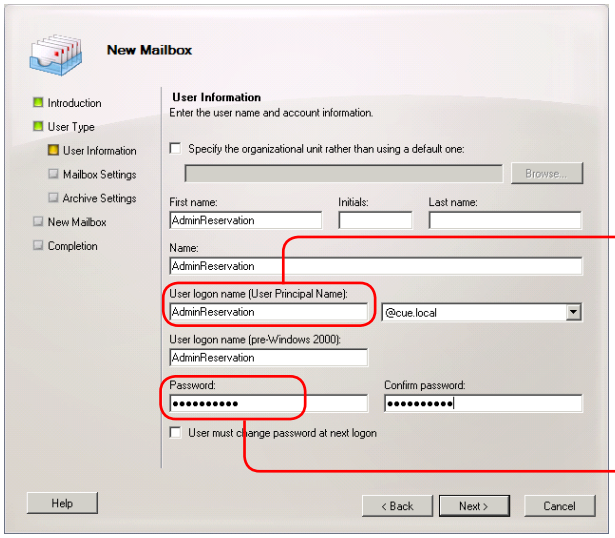
RoomNames Group

In this group of properties there is a list of all room names involved in CRS. These room names are used in GUI. RoomNames serve as user friendly names of rooms if room account names are not mnemonic. Fill these properties in the same order as in RoomAccounts.

Property Name	Data Type	Allowed Values	Default Value	Description
RoomName01	Text	Max. length 256 chars	RoomAccount01	Name of room 1 displayed in GUI objects. By default (not filled), RoomName is the same as RoomAccount.
...	...	...	...	...
RoomName40	Text	Max. length 256 chars	RoomAccount40	Name of room 40 displayed in GUI objects.

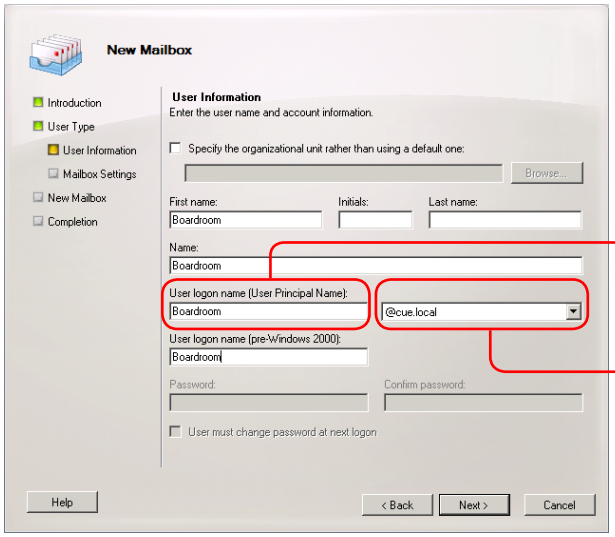
Microsoft Exchange Server Settings

Property Settings



ExchangeUserLogonName

ExchangePassword



RoomAccount01 ... RoomAccount40

ExchangeRoomEmailDomain

CRSOverviewUI Properties

Appearance Group

Property Name	Data Type	Allowed Values	Default Value	Description
FullScreen	Boolean	Any	True	This flag determines whether CRSOverviewUI is fullscreen or not. If it is True, object will fill the whole screen and size and position properties will be ignored. If it is False, size and position of CRSOverviewUI can be changed in the standard way.

Behavior Group

Property Name	Data Type	Allowed Values	Default Value	Description
LineRefreshTime	Time	Any Positive	:5.0	If number of involved rooms exceeds number of rooms possible to display on CRSOverviewUI (depending on display resolution), room info lines will automatically scroll to display all rooms. This property sets line scrolling period.
HidePrivateMeetings	Boolean	Any	True	Each meeting in Exchange Server has a flag stating whether it is public or private. If HidePrivateMeeting is True, real name of meeting on the display will be replaced by „Private Meeting" label to protect privacy. If HidePrivateMeeting is False, real name of the meeting will be displayed.

Rooms Group

Property Name	Data Type	Allowed Values	Default Value	Description
ExcludedRooms	Text	Any	Empty	You can set if all rooms will be displayed on CRSOverviewUI or not. If you need to exclude some rooms from being displayed on this object, write RoomAccounts list of excluded rooms to this property. Each RoomAccount must be on separate line.

CRSRoomUI Properties

Behavior Group

Property Name	Data Type	Allowed Values	Default Value	Description
HidePrivateMeetings	Boolean	Any	True	Each meeting in Exchange Server has a flag stating whether it is public or private. If HidePrivateMeeting is True, real name of meeting on the display will be replaced by „Private Meeting" label and other sensitive data will be hidden to protect privacy. If HidePrivateMeeting is False, real name of the meeting will be displayed and all meeting data will be displayed.
ObjectID	Long	1 - 10	1	Object ID, see Note 1 below.
EnableReserveNow	Boolean	Any	True	If EnableReserveNow is True, you can make reservations of the room from CRSRoomUI object, otherwise button Reserve Now will be hidden.
EnableCurrentMeetingEdit	Boolean	Any	False	If EnableCurrentMeetingEdit is True, it is possible to edit current meeting (buttons ExtendCurrendMeeting and FinishCurrentMeeting are displayed), otherwise editing of current meeting is disabled. See note 2 below.

Note 1

Room identification of the CRSRoomUI object is stored in the touchpanel file storage in file MyRoomUIConfig_xx.cfg, where xx is ObjectID of CRSRoomUI instance. If you have more instances of CRSRoomUI graphic object in one touchpanel, set different ObjectID for every instance, otherwise all graphic objects will show data for only one room. You can use up to 10 instances of object in one touchpanel.

Note 2

Using functions ExtendCurrentMeeting and FinishCurrentMeeting is not safe on panels placed outside the room (for example touchpanel located next to entrance to the room, where everybody has access). Enable these functions only on panels where it can not cause any troubles (usually inside the room).

Room Touch Panel Settings

Users can change the following configuration on touch panels with CRSRoomUI

- Room shown on touchpanel
- ExchangePassword

To change this item, take the following steps

1. Press the touchpanel in room name area (top left corner) for 10 sec. until keyboard appears
2. Enter ExchangePassword
3. Cue Reservation System Configuration screen appears.
4. If you need to set the room for which reservation data are displayed, push button Room Name "Change".
5. Listbox of available rooms appears; now you can select the room.
6. If you need to change ExchangePassword (password for Cue Reservation System user), push button CRS User Password "Change", enter and re-enter the new password. This change of password does not change the password in Microsoft Echange Server, so you have to change it also in "Active Directory Users and Computers" on Microsoft Windows Server.
7. You can close the settings window by Exit button.

Tips for Programmers

Set Language

All CRS graphic objects support language settings provided by XPL2 command SetLanguage. For available languages contact support@cusystem.com.

Company Logo etc.

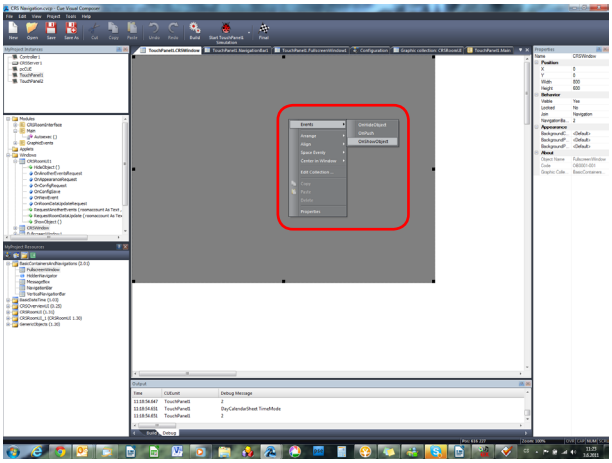
There is free space on the top and bottom of CRSOverviewUI and CRSRoomUI for placing company logos or other objects. You can place any graphic object (PictureBox, Label etc.) to this area to customize the screen.

Using CRS Graphic Objects with Navigation Bars

CRS graphic objects can be used as one of control windows in standard control application. They cannot be used directly with navigation bars, because all windows and navigation bars must be from one graphic collection (see CVC Help / Basic Graphic Library API for using NavigationBar and VerticalNavigationBar and HiddenNavigator).

But you can involve CRS graphic objects in navigation in the following way

1. Create FullScreenWindow called, for example, CRSWindow and set it to be open by NavigationBar Button with reservation icon (you can do it by settings of the join and NavigationBarButtonID properties – see see CVC Help / Basic Graphic Library API).
2. FullScreen window objects can generate the following events: OnShowObject and OnHideObject.



3. Create functions links to these two events for CRSWindow and place commands to these functions to show and hide CRS graphic objects. Here is an example of a code placed in GraphicEvents touchpanel module.

```
Private Function CRSWindow_OnShowObject(  ) Link CRSWindow.OnShowObject
        CRSRoomUI1.ShowObject()
End Function
Private Function CRSWindow_OnHideObject(  ) Link CRSWindow.OnHideObject
        CRSRoomUI1.HideObject()
End Function
```

4. Now the CRS graphic object will be navigated by NavigationBar.

Using More CRS Graphic Objects in One Touch Panel

You can use more instances of CRSRoomUI windows in one touchpanel, for example for using reservation system with more rooms on one touch panel. In this case contact support@cuesystem.com.

TROUBLESHOOTING

Time Problems

If meetings are displayed with incorrect times, check whether the same times and time zones are set on touchpanels and on ipCUE-omega. The right time zone must also be set in Microsoft Exchange server room accounts. It is recommended to use Internet Clock to automatically synchronize clocks on touchpanels and ipCUE-omega. See the chapter ipCUE-omega Setup and the manual for the appropriate touchpanel.

A user cannot make reservation of the room from Outlook or WebOutlook

Check permissions of this user in Exchange Management Console and set these permissions to Full Acccess for all required room accounts.

Error Message: Room not found

There is no room assigned to touchpanel. Assign a room to the touchpanel (see chapter User Settings).

Error Message: No room registered

You have not filled room accounts in CRSServer RoomAccounts group of properties. Please check it.

Error Message: No connection with CRS server

Touchpanel can not connect to ipCUE-omega with CRS server. Check your network and power source of ipCUE-omega.

Error Message: System is not ready

CRS has not yet read all necessary data from Microsoft Exchange Server, please wait.

Error Message: CRS doesn’t have valid data

CRS server can not read the data from Microsoft Exchange Server. Please check if Exchange Web Services of Microsoft Exchange Server are accesible from ipCUE-omega. See chapter Settings of Microsoft Exchange Server, step 5.

Error Message: Data not available

CRS server can not read data from Microsoft Exchange Server. Please check if Exchange Web Services of Microsoft Exchange Server are accessible from ipCUE-omega. See the chapter Settings of Microsoft Exchange Server, step 5.

Error Message: Invalid password

CRS user account does not have a valid password. Set the right password for CRS user account (see chapter User Settings).

Error Message: Wrong license

You do not have valid licence key file CueReservationSystem_CS0407.LicenseKey stored in ipCUE-omega filestorage. Copy this file to ipCUE-omega file storage. If you do not have this file, contact support@cuesystem.com.

Error Message: License file is not valid

Licence key file CueReservationSystem_CS0407.LicenseKey stored in ipCUE-omega filestorage is corrupted. Copy the valid file to ipCUE-omega file storage. If you do not have this file, contact support@cuesystem.com.

Error Message: Internal IP communication error XX

There are some problems with your network. Please check your network infrastructure.

Error Message: Internal file operation error XX

The ipCUE-omega or touchpanels have problem with file operations. Please check if filestorage is not full and delete unnecessary files. If the problem persists, contact support@cuesystem.com.

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NOTES

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